SUPERIOR SATELLITE ENGINEERS

MODEL MBF

MULTIPLE-SATELLITE

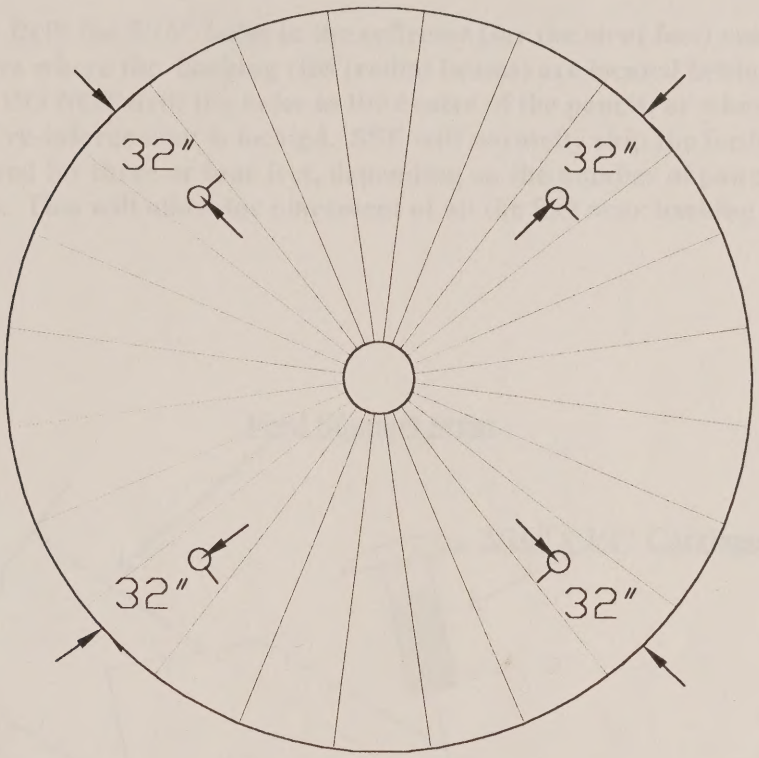
FEED SYSTEM

MECHANICAL INFORMATION AND ILLUSTRATIONS

SUPERIOR SATELLITE ENGINEERS
1743 MIDDLE RD. COLUMBIA FALLS, MT 59912
(406) 257-9590 FAX (406) 257-9599

RSI 5M ANTENNA BRACKET PLACEMENT

IMPORTANT – Measure 32" from outside edge of reflector, following the curve of the reflector.



Antenna Manufacturer: RSI remanufactured by SSE

Reflector Size: 5.0 Meter

Focal Length: 73½"

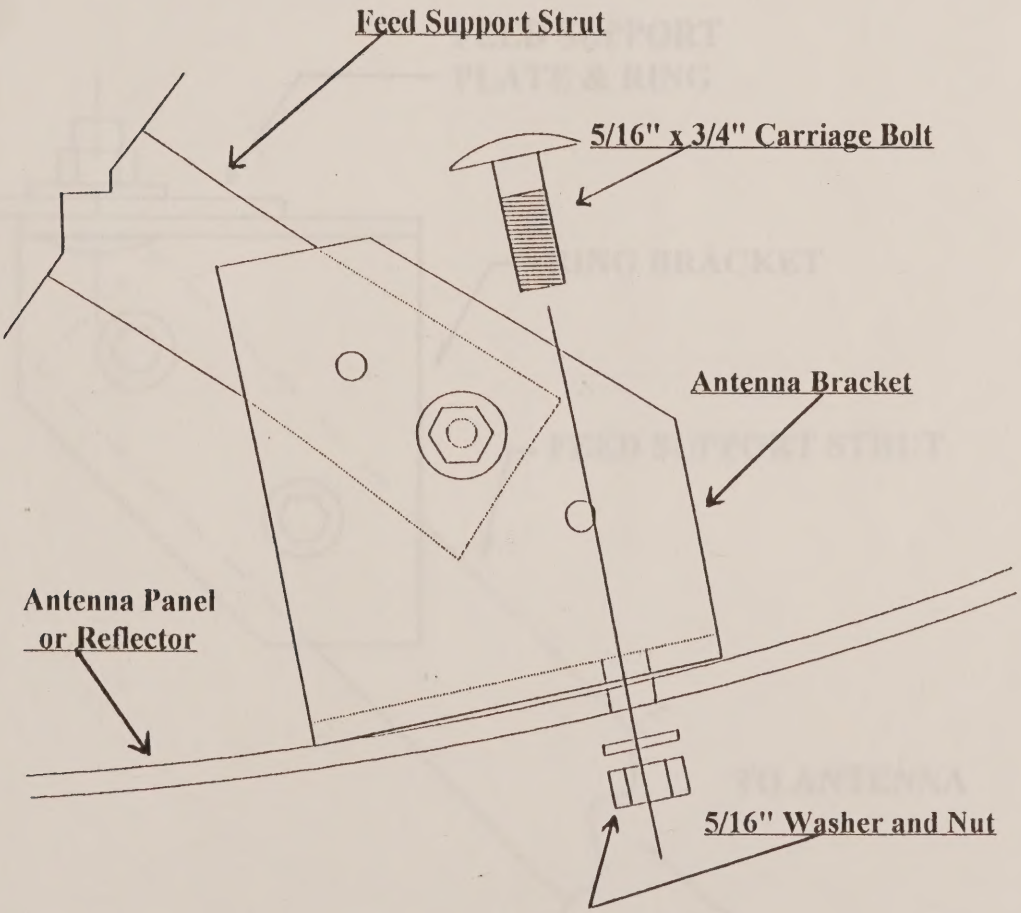
Strut Length: 82½"

Use the illustration above to locate and drill the four 5/16" holes required to attach the strut mount brackets to the reflector. It is recommended to locate the brackets on or near the radial ribs which support the reflector panels.

It is typically easy to locate four points 90° apart on the reflector, because most reflectors are made with a number of panels divisible by four. If this is not the case, carefully locate four radial lines at 90° increments. This is not absolutely critical, as the feed system will absorb and correct for a fair amount of strut foot mis-alignment.

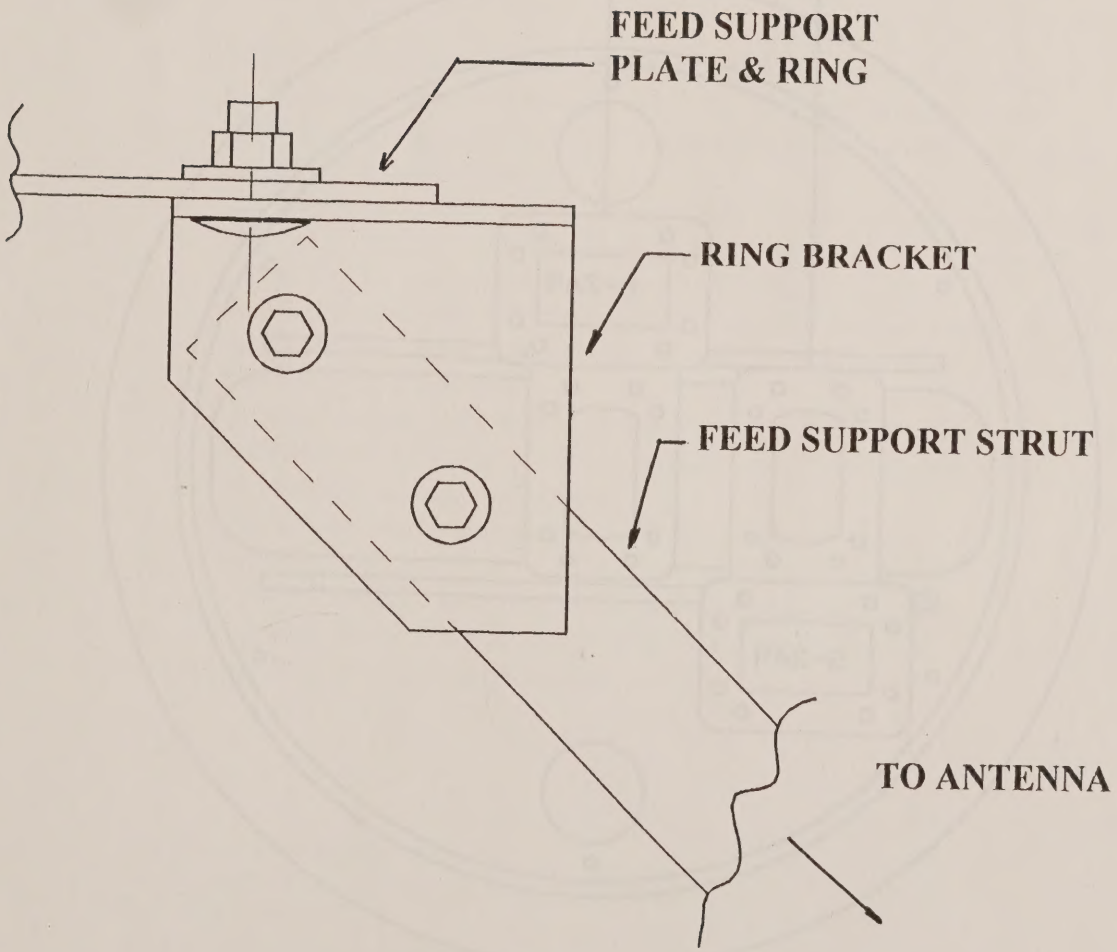
ANTENNA BRACKET ATTACHMENT DETAIL
(Strut to Antenna)

NOTE: Drill the 5/16" holes in the reflector (for the strut feet) near or on the places where the backing ribs (radial beams) are located behind the panels. DO NOT drill the holes in the center of the panels, or where no backing re-inforcement is located. SSE will normally ship the feeds configured for three or four feet, depending on the number of panels in the antenna. This will allow for placement of all the feet near backing ribs.

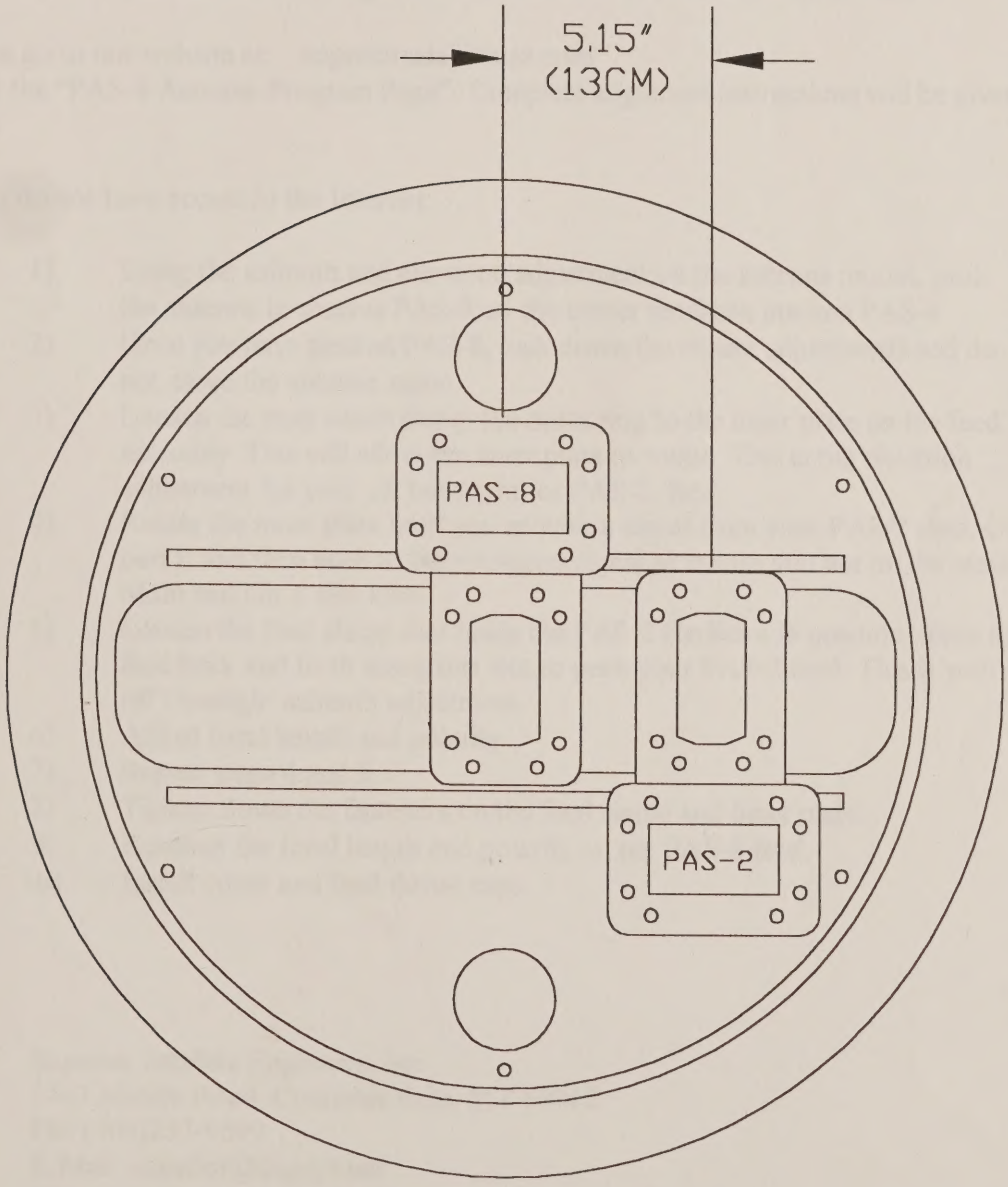


RING BRACKET ATTACHMENT DETAIL
(Strut to Feed Support Plate)

NOTE: Tighten all hardware only finger tight for first assembly and installation of feed system. Tighten all hardware securely only AFTER all feet are in place and feed plate is aligned parallel to antenna reflector.



SUPERIOR SATELLITE ENGINEERS
PRELIMINARY FEED SET-UP



Digitized by the Internet Archive
in 2024 with funding from
Amateur Radio Digital Communications, Grant 151

https://archive.org/details/superiorsatellit00unse

SUPERIOR SATELLITE ENGINEERS
PAS-8 @ 166° E.L AND PAS-2 @ 169° E.L.

Alignment Instructions

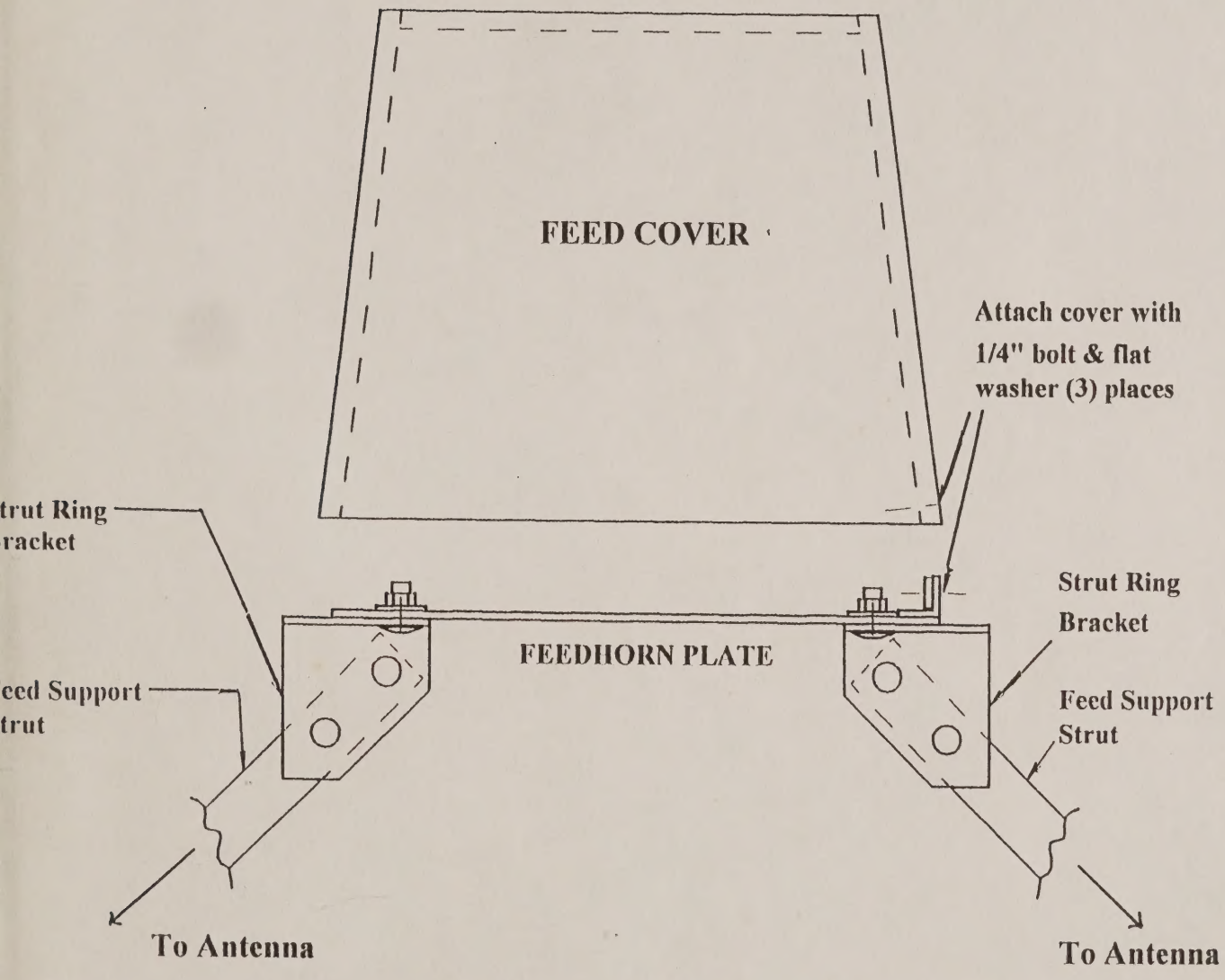
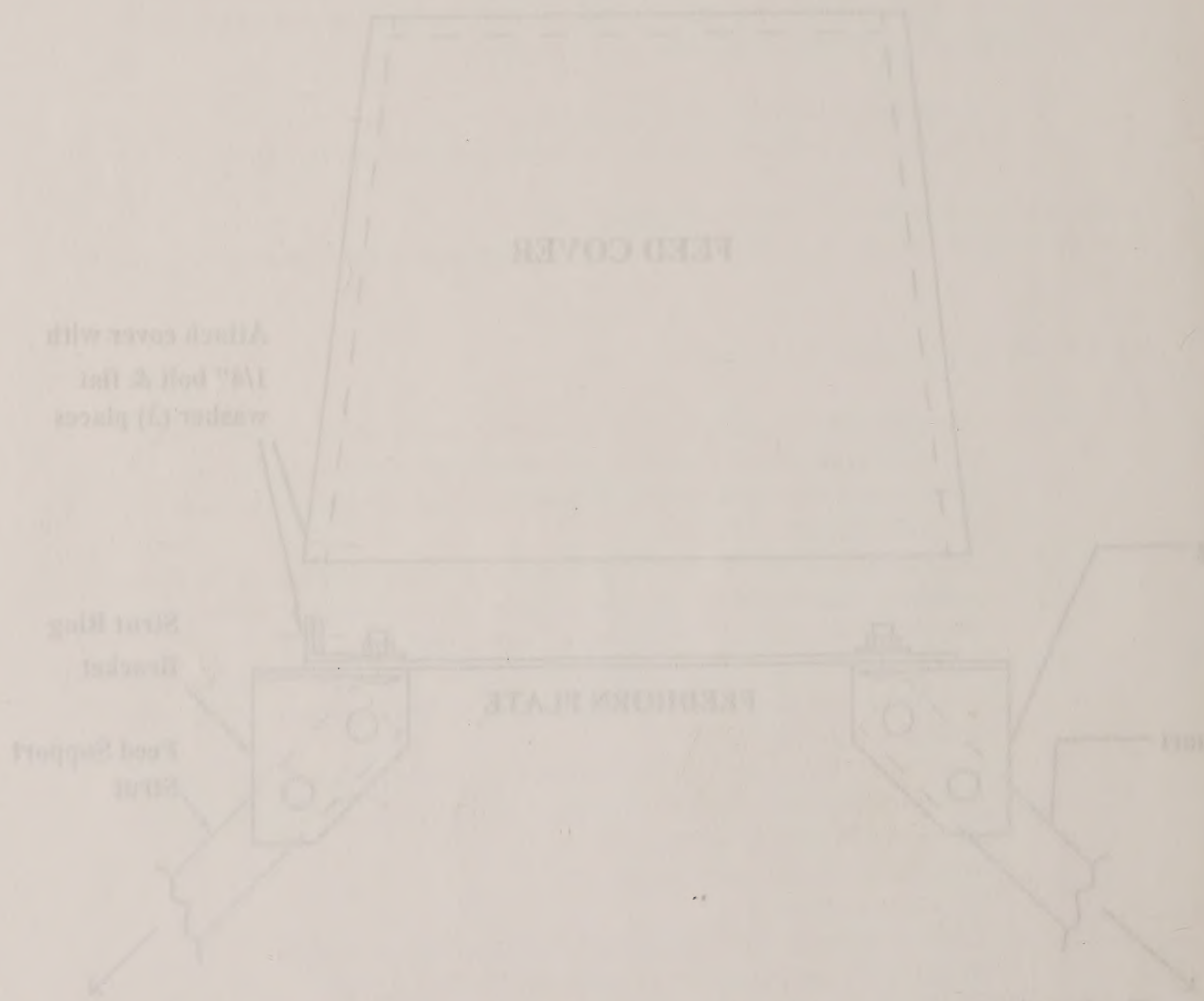
If you have access to the Internet we have designed a page on our website that will give you specific look angles and show you how to setup your system to receive both PAS-8 and PAS-2. Please have the following information available -

1) Your 5 digit affiliate agreement number
2) The latitude and longitude of your install site within 50 kilometers

Please go to our website at: superiorsatelliteusa.com
Enter the "PAS-8 Antenna Program Page". Complete alignment instructions will be given there.

If you do not have access to the Internet:

1) Using the azimuth and elevation adjustment on the antenna mount, peak the antenna to receive PAS-8 on the center feedhorn marked PAS-8.
2) Once you have peaked PAS-8, lock down the mount adjustments and do not move the antenna again.
3) Loosen the nuts which clamp the outer ring to the inner plate on the feed assembly. This will allow the inner plate to rotate. This is the elevation adjustment for your off boresight, or PAS-2, feed.
4) Rotate the inner plate until you acquire a signal from your PAS-2 feed. Go past it and then back to the strongest signal to ensure you are on the main beam and not a side lobe.
5) Loosen the feed clamp that holds the PAS-2 feedhorn in position. Slide the feed back and forth along this slot to peak your PAS-2 feed. This is your off boresight azimuth adjustment.
6) Adjust focal length and polarity.
7) Repeat steps 4 and 5.
8) Tighten down the fasteners on the feed clamp and inner plate.
9) Readjust the focal length and polarity on the PAS-8 feed.
10) Install cover and feed throat caps.

Superior Satellite Engineers, Inc.
1743 Middle Road Columbia Falls, MT 59912
Fax (406)257-9599
E-Mail superior@digisys.net
Website www.superiorsatelliteusa.com

FEEDHORN COVER ATTACHMENT DETAIL
(Cover to Feed Support Plate)